

**ABSTRACT OF THE DISCLOSURE**

A memory unit includes a memory organized into protected and non-protected areas. A controller manages access to the memory so that the protected area can be written to through a JTAG or CPU interface. Once written to, the protected area is only accessible to particular logic and cannot be over-written until the entire memory is erased. The controller is configured to allow a BCV to be stored in the memory through either the JTAG or CPU interface. The controller is also configured to allow writing to the protected area and boot configuration vector in memory before CPU boot-up by using a JTAG clock signal provided through an external pin when a system clock signal is not available. A reset circuit generates one or more initialization signals using either the BCV from memory or another BCV provided on external BCV pins, depending upon whether another external BCV pin is asserted.